**ICON H-Bridge Errata Document**

**1.0 Revision 0x0D Firmware –** The following errors can be found in revision 0x0D firmware only.

**1.1 STATE register DISABLED bit**

**Problem –** The De-energize command clears the STATE, DISABLED bit. Therefore it cannot be used to determine the state of the H-Bridge. The bit is set when a fault occurs (over-temperature or over-current condition) but is cleared when either an Energize or De-energize command is received by the ICON H-Bridge.

**Work Around –** Maintain the ICON H-Bridge on/off state in the master unit and verify that the H-bridge is enabled by monitoring the AMPS register.

**1.2 CALIBRATE AMPS, CALIBRATE TEMP registers**

**Problem -** The calibration registers are added directly to their associated registers (AMPS or TEMP). The highest bit is not used to denote subtraction, and rollover conditions are not accounted for.

**Work Around –** Use only small numbers for these registers and ensure that your system will not cause a rollover condition. For example, if CALIBRATE AMPS is equal to 0x05 then be sure your system does not measure current greater than 25 amps, otherwise the result will rollover to a number close to zero.

**1.3 ADDRESS register**

**Problem -** The ADDRESS register is changed on the fly.

**Work Around –** When changing the ADDRESS register ensure that all subsequent communication is at the new address value.

**2.0 Revision 0x0D through 0x0F Firmware –** The following errors can be found in revisions 0x0D through 0x0F firmware.

**2.1 BAUD register 9600BPS setting**

**Problem –** Some users may fail to get a response back from the ICON H-Bridge when implementing serial communication at 9600BPS.

**Work Around –** Write the controlling firmware or software to perform a retry when communication fails. Alternatively, you may reduce your baud rate to 2400BPS or 4800BPS.

Phone (530) 891-8045
Fax (530) 891-1643
e-mail solcubed@solutions-cubed.com

256 East 1st St.
Chico, CA 95928